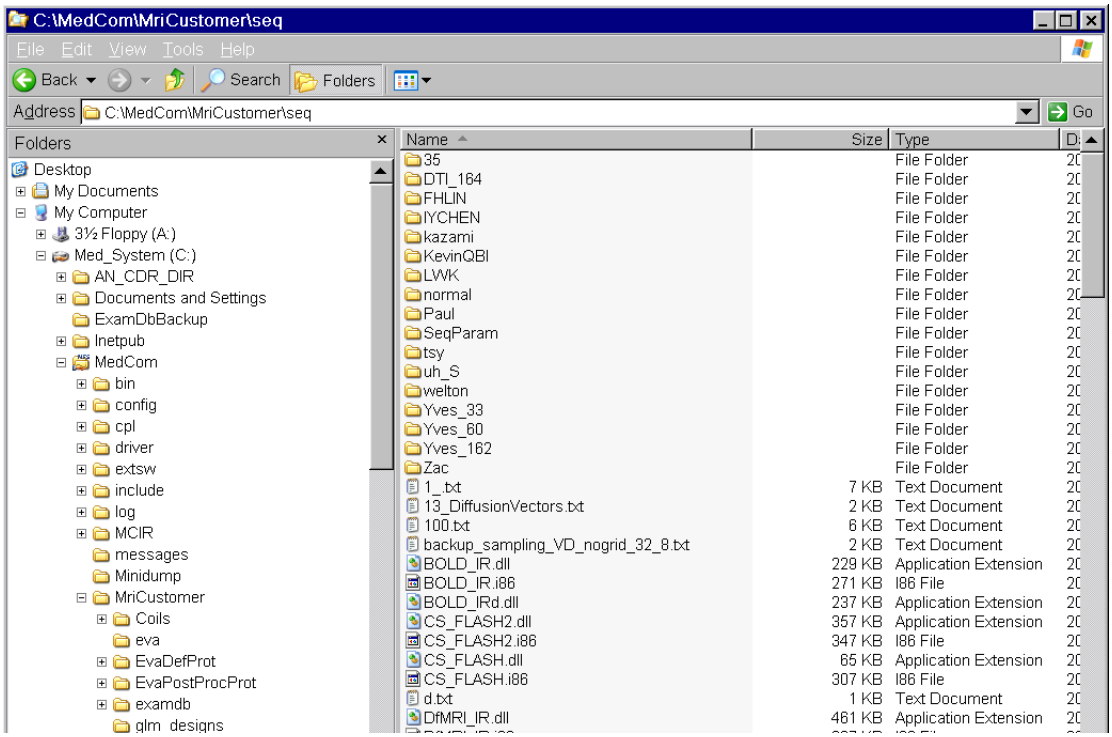
Inverse Imaging sequence installation manual on VB15A

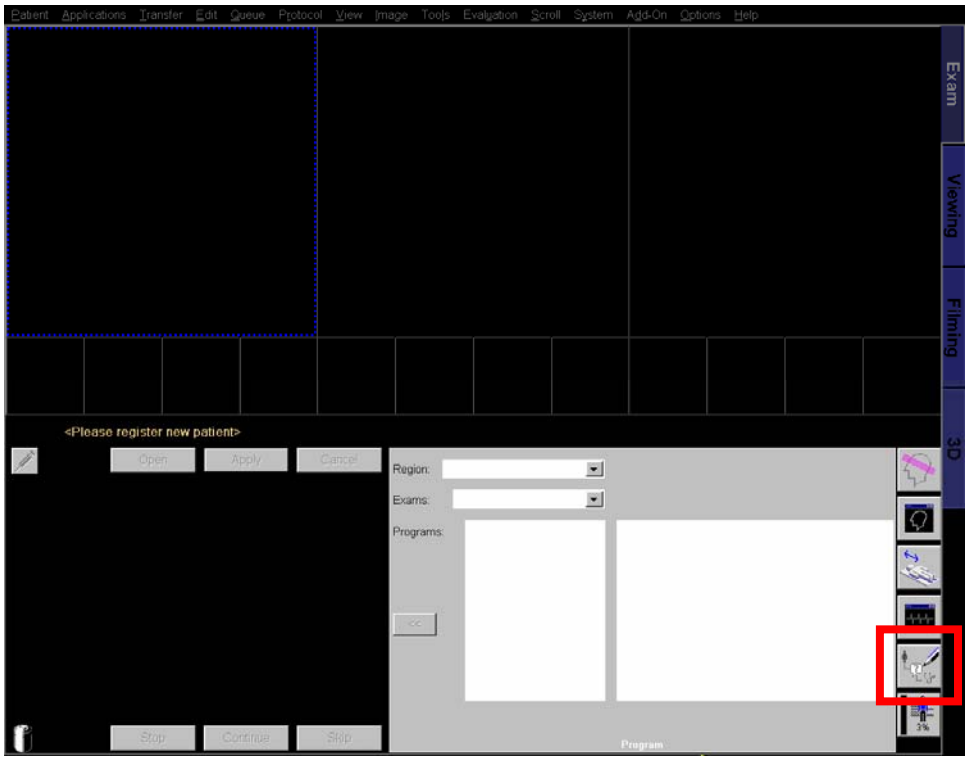
1. Copy 2 binary files:

C:/MedCom/MriCustomer/seq/epi_ini3d.dll

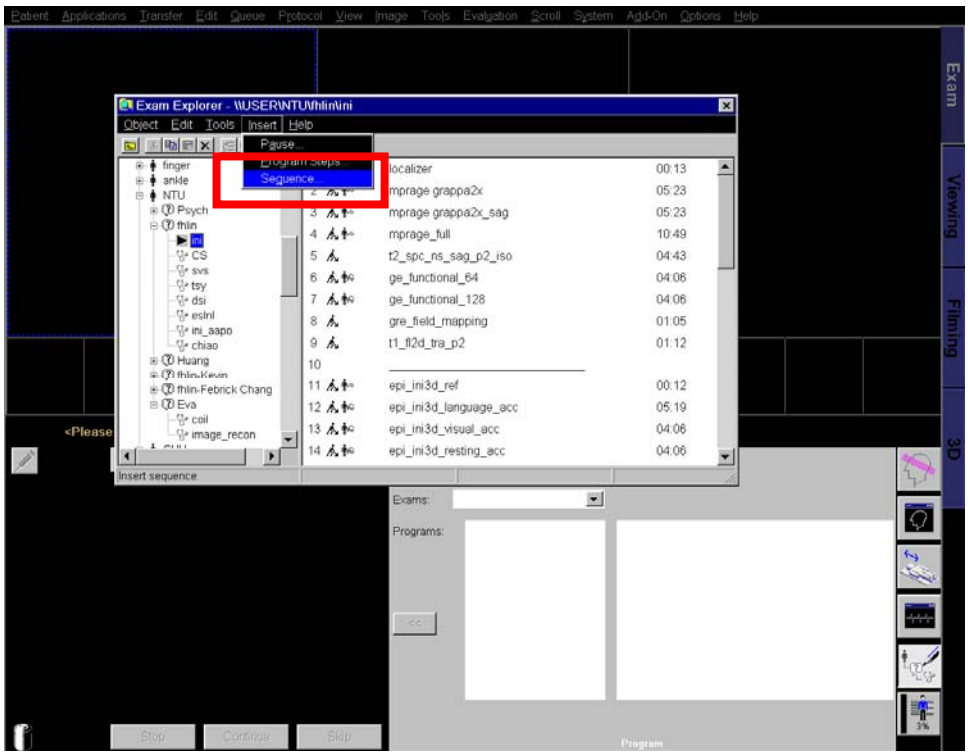
C:/MedCom/MriCustomer/seq/epi_ini3d.i86



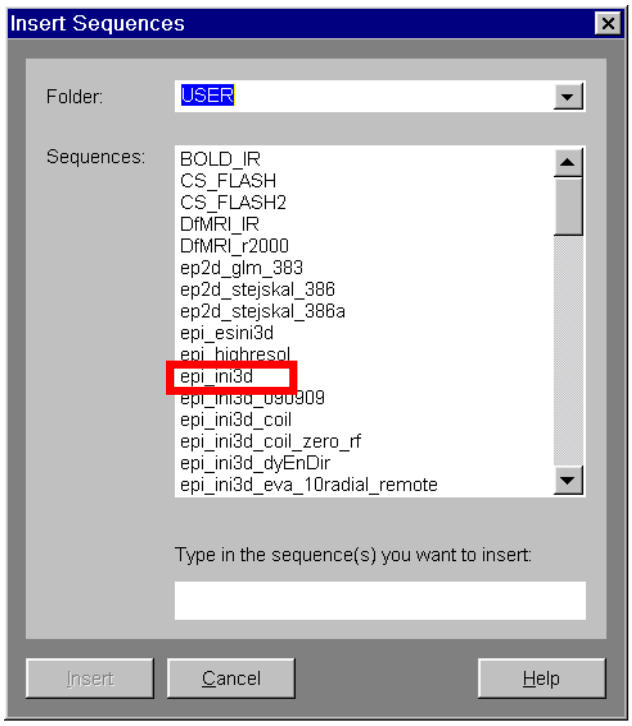
2. Insert sequence



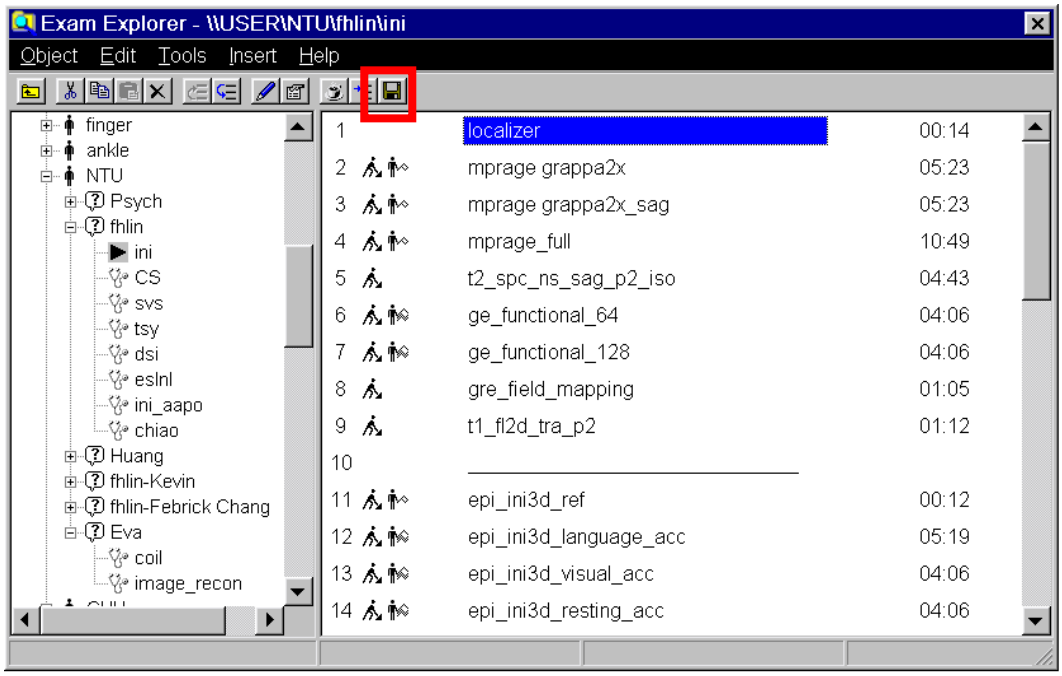
Establish a new user directory or choose existed one and go to **Insert →Sequence**



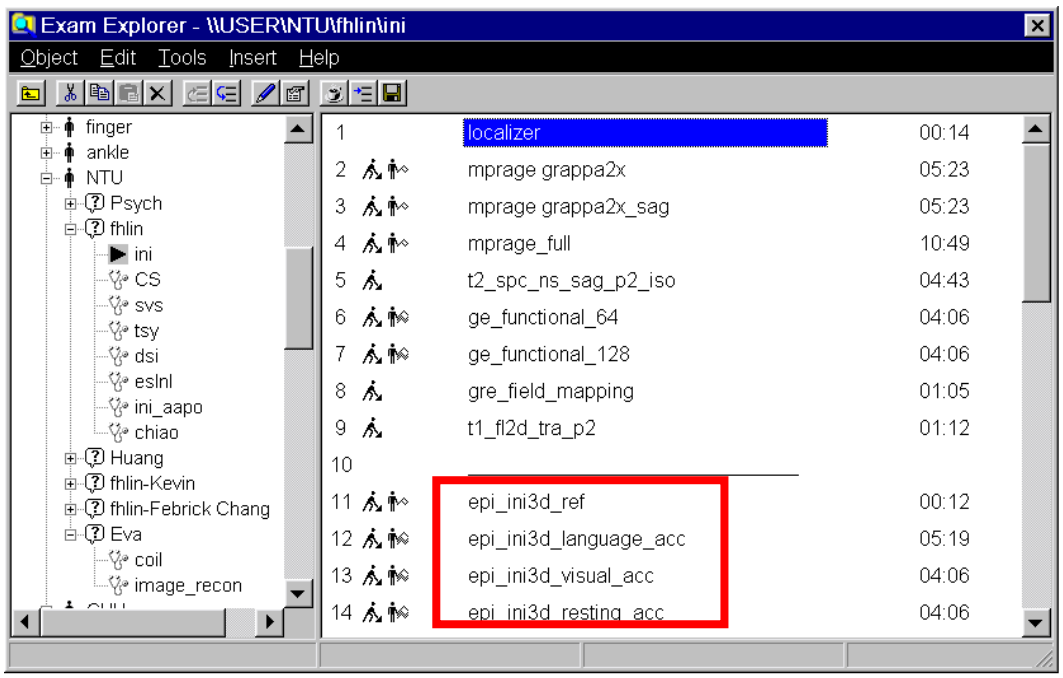
Choose sequence **epi_ini3d**



Save it



3. copy **epi_ini3d** in Exam Explorer, and rename as **epi_ini3d_ref** and **epi_ini3d_acc**



4. double click on sequence and change the protocol as follow

SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\NTU\fhlin\ini\epi_ini3d_ref

TA: 0:12 Voxel size: 4.0×4.0×256.0 mm Rel. SNR: 1.00 USER: epi_ini3d

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
AutoAlign Spine	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	single

Routine

Slice group 1	
Slices	1
Dist. factor	0 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	256.00 mm
TR	100.00 ms
TE	30.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

Contrast

MTC	Off
Flip angle	30 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	2
Pause after meas. 1	0.000 s

Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	274.387 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Coronal
Rotation	0.00 deg
F >> H	256 mm
R >> L	256 mm
A >> P	256 mm

Sequence

Introduction	Off
Bandwidth	2520 Hz/Px
EPI factor	64
Segments	1
Gradient mode	Fast
Spin Echo	Off
# of Reference Scans	64
EPI Waveform	Trapezoid
Trigger interval	16
# of Dummy Scans	120
Trigger time (ms)	10
Gradient Amplitude Limit	57.0
Slew Rate Limit	100.0
Acquisition Time	29440 us
Echo Spacing	470 us
Flat Top Time	180 us
Ramp Time	140 us

SIEMENS MAGNETOM TrioTim syngo MR B15

\\USER\NTU\fhlin\ini\epi_ini3d_visual_acc

TA: 4:06 Voxel size: 4.0×4.0×256.0 mm Rel. SNR: 1.00 USER: epi_ini3d

Properties

Prio Recon	Off
Before measurement	
After measurement	
Load to viewer	On
Inline movie	Off
Auto store images	On
Load to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
AutoAlign Spine	Off
Start measurement without further preparation	On
Wait for user to start	On
Start measurements	repeated

Routine

Slice group 1	
Slices	1
Dist. factor	0 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Rotation	0.00 deg
Phase oversampling	0 %
FoV read	256 mm
FoV phase	100.0 %
Slice thickness	256.00 mm
TR	100.00 ms
TE	30.00 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	HEA;HEP

Contrast

MTC	Off
Flip angle	30 deg
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	2400
Pause after meas.	0.000 s

Resolution

Base resolution	64
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off
Matrix Coil Mode	Auto (CP)
Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
Raw filter	Off
Elliptical filter	Off

Geometry

Series	Interleaved
Special sat.	None

System

Body	Off
HEP	On
HEA	On
SP4	Off
SP2	Off
SP8	Off
SP6	Off
SP3	Off
SP1	Off
SP7	Off
SP5	Off
Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Coil Combine Mode	Adaptive Combine
Auto Coil Select	Default
Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Silicone	Off
Ref. amplitude 1H	274.387 V
Adjustment Tolerance	Auto
Adjust volume	
Position	Isocenter
Orientation	Coronal
Rotation	0.00 deg
F >> H	256 mm
R >> L	256 mm
A >> P	256 mm

Sequence

Introduction	Off
Bandwidth	2520 Hz/Px
EPI factor	64
Segments	1
Gradient mode	Fast
Spin Echo	Off
# of Reference Scans	0
EPI Waveform	Trapezoid
Trigger interval	10
# of Dummy Scans	60
Trigger time (ms)	10
Gradient Amplitude Limit	57.0
Slew Rate Limit	100.0
Acquisition Time	29440 us
Echo Spacing	470 us
Flat Top Time	180 us
Ramp Time	140 us